UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
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MEMORANDUM

TO: Cynthia Dougherty, Director
Permits Division

FROM: Max H. Dodson, Director
Water Management Division

SUBJECT: Intake Credits

INTRODUCTION

The purpose of this memorandum is to provide a Region VIII position on the issue of intake credits and the options paper that has been developed by your staff. This issue has been the subject of extensive and lengthy debate within the Region by permits, water quality standards, and total maximum daily load (TMDL) staff. I am pleased to report to you that all Region VIII staff are in concurrence with the following option and we strongly support its application nationally.

THE REGION VIII POSITION

We do not fully support any of the five options presented in the most recent draft of the intake credit options paper. Instead, we suggest that the following option should be pursued as a national approach. We do not believe that this problem requires regulatory revisions at this time.

The Region VIII Option

For any point source discharge to a nonattainment water, the discharger's effluent limit is based on a total maximum daily load (TMDL) analysis designed to achieve water quality standards, unless a variance from water quality standards has been issued to the facility (or to the waterbody). This approach applies regardless of the source of the intake water (i.e., same segment, another segment, groundwater, etc.). Thus, except in very limited circumstances where an exception is justified (as described below), a discharger may not receive a direct credit for pollutants in the source of its intake water.

Where a comprehensive TMDL is not yet available which addresses the optimum balance of controls for all sources within the watershed, the discharger's effluent limit is based on a simplified TMDL which sets the wasteload allocation (WLA) equal to the applicable ambient water quality standard. Under this simplified TMDL, the allocation for all upstream sources, whether point or nonpoint, is also set equal to the applicable water quality standard. Such a TMDL is consistent with achieving compliance with water quality standards (i.e., once all point and nonpoint sources meet their wasteload allocation or load allocation, respectively).

In implementing this approach, the presence of pollutants in the intake water is immaterial. The discharger is responsible for returning water to the environment at a quality sufficient to meet all WQBELs, based on the TMDL analysis. The discharger must meet all WQBELs even if the discharge does not constitute a net addition of pollutants to the waterbody beyond what is present in the background water quality. All WQBELs must reflect the TMDL analysis which is developed to ensure compliance with applicable water quality standards (i.e., including any temporary variances, site-specific criteria, or changes in the designated use of the water body).

An exception to this approach may be made on a pollutant-by-pollutant basis using the available information and best professional judgment. For facilities where an exception is justified (i.e, based on a lack of reasonable potential), it may not be appropriate to establish an effluent limit for the pollutant(s) of concern. Such an exception may be granted only where the following three conditions are satisfied:

1) **The facility diverts water for use and in no way modifies the intake water character for the pollutant of concern** (i.e., either by increasing pollutant concentration through evaporation or by adding pollutant mass from internal sources). Facilities that add pollutants and subsequently remove such added pollutants via treatment will not satisfy this condition and will be responsible for satisfying any WQBELs for the pollutants.

2) **The point of diversion is on the same waterbody segment as the point of discharge.** Facilities that discharge to downstream segments, tributaries, or other basins will not satisfy this condition and will be responsible for satisfying any WQBELs for the pollutants in question.

3) **The timing of the discharge is such that the discharge does not create a water quality standards exceedence that would not have occurred otherwise.** Facilities that have a reasonable potential to contribute to an exceedence by diverting water during high flow conditions, when background

water quality could be poor, and returning the water during low flow conditions, when background water quality may be good, will not satisfy this condition and will be responsible for satisfying any WQBELs for the pollutants in question.

Where all of the above three conditions are satisfied, it is not necessary or appropriate to establish permit limits for the pollutant(s) of concern for such facilities. The best example of a facility that may satisfy these conditions is one that diverts water for purposes of once-through cooling.

RATIONALE:

The waters once removed have lost their character as waters of the United States and constitute the addition of pollutants when subsequently discharged. A direct mechanism to adjust WQBELs to reflect intake water pollutants similar to 40 CFR 122.45(g) is not appropriate because of the fundamental differences between the technology-based and water quality-based requirements of the CWA. In certain exceptional cases, such as once-through cooling, establishing a permit limit may not be necessary or appropriate because of a lack of reasonable potential to cause or contribute to a violation of water quality standards under 40 CFR 122.44(d).

PROS:

- Provides an expedient approach to permitting in nonattainment waters where a comprehensive TMDL has not been developed or where a variance or site-specific criterion has not been established; it does rely on a legally enforceable TMDL which is designed to implement standards and which can be established at the same time the NPDES permit is issued.

- Establishes a more environmentally-protective approach than is currently employed for many permits, such as setting permit limits equal to background water quality or relying solely on technology-based controls; the background quality and technology approaches both ignore water quality standards and result in issuance of permits that are not consistent with the CWA.

- Promotes equity and consistency in water quality-based permitting for nonattainment waters; it requires attainment of water quality standards throughout the watershed.

- Forwards the Act's Section 101(a) goal of restoring the physical, chemical, and biological integrity of the Nation's waters.

- Consistent with Section 301(b)(1)(C) which requires permits to include limitations necessary to meet applicable WQS.

- Consistent with Section 303(d)(1)(C) which requires TMDLs to be consistent with water quality standards.

- Prevents potential deterioration of water quality by precluding credits for discharge of both intake water pollutants and waste stream pollutants to waters exceeding water quality criteria.

CONS:

- Application of a WQBEL based on a simplified TMDL may result in more stringent effluent limits, creating an economic incentive for the discharger to petition for a revised WLA, a site-specific criterion, or a variance from water quality standards. In some States, completing such actions is resource-intensive and/or politically difficult.

- Where a WQBEL based on a TMDL has been applied, subsequent adoption of a variance or site-specific criterion could substantially change the TMDL and increase permitted loadings. Depending upon the timing, it is possible that the discharger could have already invested in treatment technology to achieve the prior WLA.

CONCLUSION

Again, we strongly support national application of the option described above. We believe that the option strikes an appropriate balance between environmental protection and the need for expediency in the permitting process, while also recognizing that there are very limited situations (e.g., once-through cooling) where the discharger should not be held responsible for achieving water quality-based limits. If you have questions or comments please call me, Steve Burkett (FTS 330-1623), Chief, NPDES Branch, or Dale Vodehnal (FTS 330-1565), Chief, Water Quality Branch.

cc: Bill Diamond
Region 8 Intake Credit Contacts